

INTER-AMERICAN TROPICAL TUNA COMMISSION

SCIENTIFIC ADVISORY COMMITTEE

12TH MEETING*(by videoconference)*

10-14 May 2021

**RECOMMENDATIONS OF THE SCIENTIFIC ADVISORY COMMITTEE (SAC)
TO THE COMMISSION (corrigendum*)****A. RECOMMENDATIONS OF THE SCIENTIFIC ADVISORY COMMITTEE (SAC)****1. CONSERVATION AND MANAGEMENT****1.1. Tropical tunas (yellowfin, bigeye, and skipjack):**

1.1.1. The SAC recommends the establishment of a triennial management cycle for the tropical tuna fishery in the EPO (2022-2024). This cycle does not prejudice the possibility for the Commission to review and revise on a yearly basis the conservation and management measures that it has adopted, taking into account their effect on the stocks and the monitoring of the status of the stocks.

1.1.2. The SAC recommends that the provisions of the current resolution (C-20-06) be maintained for 2022-2024, except those related to the FAD fishery which must be reviewed and adjusted, as needed, according to Resolution C-20-05, by the Commission.

1.1.3. Within the management cycle 2022-2024, the SAC recommends that the Commission consider:

- a) the proposal for operational rule described in SAC-12-08, as part of the package of possible measures to be implemented to prevent an increase of fishing mortality beyond the status quo levels;
- b) adopting measures to control fishing on FADs that avoid exceeding the average fishing mortality in this fishery between 2017 and 2019.

1.2. Pacific bluefin tuna:

The SAC recommends the extension of the provisions of Resolution C-18-01, as already extended by Resolution C-20-02, and that the Commission take note that increased catches based on the scenarios analyzed are possible under the harvest strategy prepared by the joint tuna RFMOs Working Group. The choice of catch scenario should take into account the desired rebuilding rate and the distribution of catch between small and large bluefin.

1.3. North Pacific albacore tuna name:

The SAC recommends that CPCs:

- a) continue to implement Resolutions C-05-02, C-18-03, presently in force;

* Recommendation 2.2.Mahi-mahi (Dorado), which comprised two subparagraphs, had been adopted provisionally and ad referendum. After it was circulated on 5 May 2021 with the other recommendations and also posted on the meeting website, one Member formally objected to the inclusion of subparagraph b) which was consequently deleted.

- b) use the results of the concluded MSE process to establish reference points and a harvest control rule (HCR) for North Pacific albacore tuna.

1.4. Silky sharks:

The SAC, considering the recent improvements in shark fishery data collection in Central America (SAC-11-13), as well as the potential expansion of the data collection program into other coastal states, recommends that:

- a) Resolution C-19-05 be extended for another biennial period (2022-2023);
- b) CPCs enhance compliance with the following provisions of Resolution C-19-05 (to be extended in the new resolution):
 - i. prohibiting the use of steel leaders during a period of three consecutive months of each year for the relevant portions of their national fleets;
 - ii. requiring that the Commission be notified of the period of the prohibition, the number of vessels subject to the prohibition, and how compliance with the prohibition will be monitored.

1.5. Seabirds:

The SAC recommends that Resolution C-11-02 be revised consistent with the current state of knowledge regarding seabird mitigation techniques.

2. RESEARCH IN SUPPORT OF CONSERVATION AND MANAGEMENT

2.1. Tropical tunas:

The SAC recommends that, in collaboration with CPCs and relevant stakeholders, including the fisheries sector:

- a) stock assessments and risk analysis for tropical tunas continue to be improved;
- b) an assessment for skipjack tuna be developed, based, among others, on recently collected tagging data, following SAC-12-06;
- c) BET, YFT and SKJ exploratory assessments be carried out in 2023 with the best available information;
- d) support for management strategies evaluation (MSE) for tropical tunas continue to be provided, following guidelines from resolutions C-16-02 and C-19-07;
- e) implementation of tagging cruises be continued, with the adoption of the most efficient and appropriate mechanisms to increase their efficiency and feasibility and facilitate their carrying out.

2.2. Mahi-mahi (Dorado):

The SAC recommends that the Commission encourage those Members participating directly or indirectly, as flag States or coastal States, in the catch of Dorado to contribute to and participate in the joint research project presented by Ecuador and Peru in document SAC-12 INF-D, with the understanding that, in the absence of the additional necessary human and financial resources, the only contribution that may be made by the Commission and its scientific staff would be to provide general guidance and technical advice as appropriate and feasible.

2.3. Close kin mark-recapture:

Considering the potential benefits of Close Kin Mark-Recapture for BET, Silky Sharks and other species, the SAC recommends that a workplan be funded, starting with Project H.7.e: *Feasibility and sampling design for close-kin mark-recapture analysis of stocks in the EPO*.

3. DATA COLLECTION

3.1. General data provision:

The SAC recommends that, through a series of workshops planned and facilitated by the staff, Resolution-C-03-05 be revised in consultation with CPCs, taking into consideration the elements presented in document SAC-12-09. These workshops will be organized by main fishery, with the purpose of:

- a) discussing improvements in data collection, any required additional resources and capacity building activities;
- b) developing standard data reporting templates (initial draft appendixes in document SAC-12-09);
- c) modernizing Resolution-C-03-05 to align data reporting requirements with the Antigua Convention, the WCPFC Scientific Service Provider (SSP) and harmonize them with FAO and other tuna RFMOs standards.

3.2. Data for purse seine vessels without on-board observers:

The SAC recommends that each CPC ensure that its competent authority collect the logbook and other pertinent data from every fishing trip made without an observer aboard at the end of the trip, and provides them to the IATTC staff as soon as possible afterwards.

3.3. Data collection for sharks:

The SAC recommends that:

- a) an IATTC field office be established in Central America near some of the ports where most shark landings occur;
- b) all vessel captains be required to complete the transshipment declaration forms of Resolution C-12-07 by species, for all shark catches;
- c) the Regional Program on long-term data collection for shark catches in the artisanal fisheries of Central America (Project C.4.b.) be extended:
 - d) to the other CPCs bordering the Antigua Convention Area as an important mean to improve the monitoring of these species as well as the implementation of the commitments and obligations related to their conservation;
 - e) to other species such as dorado, billfishes, among others, as appropriate.

3.4. Development of a fishery-dependent ecological sampling program for EPO tuna fisheries:

The SAC recommends that a fishery-dependent ecological sampling program be developed in collaboration with CPCs and relevant stakeholders, to collect stomach and tissue samples from key predators for ecological analyses of contents, stable isotopes and fatty acids.

3.5. Fishing gear configuration:

The SAC recommends that vessels be required to submit the purse-seine and longline gear description forms appended to Document SAC-05-05. Any significant modifications made to the gear subsequently should be reported on these forms prior to departing port with the modified gear.

3.6. Observer coverage of purse seine vessels of less than 364t carrying capacity:

The SAC recommends that a plan be developed to establish a fleet-wide observer program for purse-seine vessels of less than 364t carrying capacity, with a sampling coverage of 20%, which may include the use of electronic monitoring.

3.7. Longliners observer data standards and reporting:

The SAC recommends that CPCs submit all operational longline observer data collected from 1 January 2013 to present, consistent with the minimum data standards contained in Annex B of C-19-08, or provide a clear and complete explanation as to why the missing datasets have not been submitted.

3.8. Electronic monitoring system (EMS):

The SAC recommends that:

- a) the definitions in Annex 1 of document EMS-01-01 be adopted, at least on a provisional basis;
- b) the EMS workplan detailed in document EMS-01-02 be adopted, at least on a provisional basis, and work be carried out intersessionally to make adjustments as necessary;
- c) the staff be tasked, in consultation with the members and other relevant stakeholders, with the development of a draft for the Terms of Reference for the EM workshops, for potential adoption by the Commission at its annual regular meeting in 2021.

B. RECOMMENDATIONS OF THE WORKING GROUP ON BYCATCH AS ENDORSED BY THE SAC:

1. That IATTC staff host a virtual workshop prior to analyze scientific information regarding different circle hooks sizes and their effectiveness at mitigating on bycatch and target species with the specific goal of defining the characteristics of an adequate hook for the purpose of mitigating bycatch of sea turtles in accordance with Resolution C-19-04.
2. That IATTC staff consider a work plan to gradually increase the coverage of longline observers to 20% on vessels >20 m LOA.
3. To consider procedures to complement or replace the existing observers' system by implementing electronic monitoring (EMS) to be gradually incorporated over time, as appropriate according to the various fleets' characteristics.
4. That the IATTC Staff develop and the Commission adopt Terms of Reference for future workshops on electronic monitoring aimed at adopting definitions and minimum standards for electronic monitoring system (installation, minimal data, image review, etc), (2) the staff, SAC and Commission provisionally use definitions drafted by the IATTC Staff (EMS-01-01), and (3) the

Commission provisionally adopt the workplan proposed by staff.

5. That CPCs with missing or unavailable longline observer data, as described in document BYC-10 INF-D, provide additional information to IATTC staff explaining the way and timeframe when such CPCs shall improve data provision.
6. To encourage further research on methods of handling and releasing of elasmobranchs (sharks, mantas, rays) from purse-seine vessels to maximize the survival of bycatch species, through structural changes aimed at good management practices.

C. RECOMMENDATIONS OF THE WORKING GROUP ON FADS AS ENDORSED BY THE SAC:

1. **On definitions:**

The Commission to adopt the set of terms listed in Annex 1 as interim draft definitions related to FAD fishing operations.

2. **On data collection:**

- a) CPCs to provide the forms on FAD interactions from each fishing trip that is made without an observer aboard, to the IATTC staff as soon as possible after the trip terminates, and that these forms are those provided by the IATTC staff or downloaded from the IATTC website, without modifications.
- b) The Secretariat to contact CPCs no later than 80 days before the SAC to check the status of incomplete data submissions regarding the requirements of the Resolution C-19- 01.
- c) CPCs to require their vessels to record data related to interactions with FADs of purse-seine vessels without an observer aboard using exclusively the standard form developed by the IATTC staff (Fish- aggregating device form (FADS), Sep. 2018 ver.2)
- d) CPCs to provide to the IATTC staff the same raw buoy data received by original users (i.e. vessels, fishing companies), including both trajectories and acoustic biomass information.
- e) The Commission scientific staff and CPCs to continue exploring technologies to mark and read automatically and remotely marking identification to improve FAD/buoy marking and to solve errors on data collection.
- f) The Commission and its members to reactivate the mechanisms of cooperation between the various tuna RFMOs regarding FADs, including in particular the Joint tuna- RFMO FAD Working Group. This will allow work on harmonization of data collection, definitions, indicators, and other cross-cutting issues.

3. **On management measures:**

The Commission to consider additional options -- along with active FAD limits -- to lower the number of FADs in the water, such as clarifying controls on remote activation and deactivation and controls on numbers of deployed FADs.